

What is claimed is:

1. A computer-implemented information retrieval method, comprising the steps of:

generating a filtering query by specifying at least one query operator from selected data groupings of a filter tree table;

running said filtering query against an unfiltered data table containing items of data;

creating a filtered data table by receiving one or more data items filtered from said unfiltered data table in response to said filtering query and placing said received data items in said filtered data table;

displaying data items in said filtered data table;

displaying filter data in said filter tree table, with said filter data including selected data groupings;

accepting a user input that selects or de-selects a data grouping to be filtered and displayed; and

branching back to the generating step upon receipt of said user input.

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2. The method of claim 1, further comprising the steps of:  
selecting one or more data sets;  
creating said unfiltered data table by receiving in said  
unfiltered data table a plurality of data items from said one or  
more data sets;  
displaying said plurality of data items of said unfiltered  
data table; and  
updating said filter tree table, with said filter tree table  
including selectable data groupings for said one or more data  
sets.

3. The method of claim 1, further comprising the steps of:  
generating a summary query from selected data groupings of  
said filter tree table;  
running said summary query against said filtered data table;  
generating a summary result comprising a data item count for  
each selected data grouping; and  
updating said filter tree table with said summary results.

4. The method of claim 1, further comprising the step of  
generating one or more data item results in response to said  
summary query.

5. The method of claim 1, further including a preliminary step of selecting a data set.

6. The method of claim 1, wherein said data set comprises a database.

7. The method of claim 1, wherein said data set comprises one or more data tables.

8. The method of claim 1, wherein a first filter level of said filter tree table corresponds to a column in said data set.

9. The method of claim 1, further including the step of displaying a data item count for a particular data grouping.

10. The method of claim 1, further including the step of displaying a data item count for a particular data grouping and updating all data item counts upon a data grouping selection or de-selection by said user.

11. The method of claim 1, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

12. The method of claim 1, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

13. The method of claim 1, wherein said filtering query is a SQL query.

14. The method of claim 1, wherein said accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping.

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15. A computer-implemented information retrieval method,  
comprising the steps of:

selecting one or more data sets;

creating an unfiltered data table by receiving in said  
unfiltered data table a plurality of data items from said one or  
more data sets;

displaying said plurality of data items of said unfiltered  
data table;

generating a filter tree table, with said filter tree table  
including selectable data groupings for said one or more data  
sets;

generating a filtering query from selected data groupings of  
said filter tree table, with said filtering query comprising one  
or more query operators;

running said filtering query against said unfiltered data  
table;

creating a filtered data table by receiving in said filtered  
data table one or more data items filtered from said unfiltered  
data table in response to said filtering query;

displaying data items in said filtered data table;

generating a summary query from selected data groupings of  
said filter tree table;

running said summary query against said filtered data table;

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20. The method of claim 15, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

21. The method of claim 15, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

22. The method of claim 15, wherein said filtering query is a SQL query.

23. The method of claim 15, wherein said accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping.

24. The method of claim 15, wherein said summary result further includes a data item result for said each selected data grouping.

25. An information retrieval process, comprising the steps of:

providing a data set to an unfiltered data table;

generating a filtering query by selecting one or more query operators and with said one or more query operators corresponding to selected data groupings in a filter tree table;

running said filtering query against said unfiltered data table;

receiving one or more data items in a filtered data table, with said one or more data items being filtered from said unfiltered data table in response to said filtering query;

displaying said one or more data items in said filtered data table;

generating a summary query from selected data groupings in said filter tree table;

running said summary query against said filtered data table to produce a summary result, with said summary result comprising a data item count for each selected data grouping;

providing said summary result to said filter tree table;

displaying said filter tree table;

accepting a user input to said filter tree table, with said user input comprising a selection or de-selection of a data grouping; and

branching back to the step of generating a filtering query upon receipt of a user input.

26. The information retrieval process of claim 25, further comprising the steps of:

selecting one or more data sets;



creating said unfiltered data table by receiving in said unfiltered data table one or more data items from said one or more data sets;

displaying said one or more data items of said unfiltered data table; and

updating said filter tree table, with said filter tree table including selectable data groupings for said one or more data sets.

27. The information retrieval process of claim 25, further including a preliminary step of selecting a data set.

28. The information retrieval process of claim 25, wherein said data set comprises a database.

29. The information retrieval process of claim 25, wherein said data set comprises one or more data tables.

30. The information retrieval process of claim 25, wherein a first filter level of said filter tree table corresponds to a column in said data set.

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31. The information retrieval process of claim 25, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

32. The information retrieval process of claim 25, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

33. The information retrieval process of claim 25, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

34. The information retrieval process of claim 25, wherein said filtering query is a SQL query.

35. The information retrieval process of claim 25, wherein said accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping.

36. The information retrieval process of claim 25, wherein said summary result further includes a data item result for said each selected data grouping.

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37. An information retrieval apparatus, comprising:

- a processor;
- a user interface communicating with said processor and capable of interfacing with a user;
- an unfiltered data table communicating with said processor and capable of storing one or more data items;
- a filtered data table communicating with said processor and capable of storing one or more filtered data items;
- a filter tree table communicating with said processor and capable of storing one or more selected data groupings;

wherein said processor receives user inputs from said user interface, controls a flow of data items into said unfiltered data table, generates at least one filtering query using selected data groupings in said filter tree table, runs said at least one filtering query against said unfiltered data table, fills said filtered data table with filtered data items from said unfiltered data table, displays said filtered data table, displays said filter tree table, accepts user inputs to said filter tree table, and generates a filtering query upon receipt of a user input.

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38. The apparatus of claim 37, wherein said information retrieval apparatus comprises a data server accessible to clients in a client-server arrangement.

39. The apparatus of claim 37, wherein said information retrieval apparatus comprises a user computer that further includes input and output devices.

40. The apparatus of claim 37, further comprising a data source interface communicating with said processor and capable of receiving data from one or more external data sources.

41. The apparatus of claim 37, further comprising a data source interface communicating with said processor and capable of receiving data from one or more external data sources, and wherein said data source interface is capable of translating received data items into a predetermined data format.

42. The apparatus of claim 37, further comprising at least one internal data source communicating with said processor.

43. The apparatus of claim 37, wherein said filter tree table is capable of storing data item counts corresponding to each data grouping.

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44. The apparatus of claim 37, wherein said filter tree table is capable of storing data item results corresponding to each data grouping.

45. The apparatus of claim 37, wherein said processor is capable of generating a display of one or more data items corresponding to selected data groupings in said filter tree table.

46. The apparatus of claim 37, wherein said processor is capable of generating a display of a parametric filter comprising data groupings stored in said filter tree table.

47. The apparatus of claim 37, wherein said processor is capable of generating a display of a parametric filter comprising data groupings and data item counts stored in said filter tree table.

48. The apparatus of claim 37, wherein said processor is capable of generating a display of a parametric filter comprising data groupings and data item results stored in said filter tree table.